Managing Pain: The Challenge in Underserved Populations: Appropriate Use versus Abuse and Diversion

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EXECUTIVE SUMMARY

ISSUE: Inadequate pain management is a serious public health problem that affects a wide cross-section of Americans. Patients are often denied sufficient medication, because physicians lack training and fear scrutiny from federal and state regulatory agencies. In addition, even the state-financed system of care, Medicaid, has been increasingly denying payment for the best treatment for pain management. These factors are complicated by physician bias about various subgroups and poor physician-patient communication. Comprehensive patient assessment plays a crucial role in determining appropriate treatment and identifying potential abuse problems. Physicians must routinely document medications analgesic effects and screen for potential ill effects and drug abuse.

OBJECTIVE: To examine the prevalence of the undertreatment of pain, particularly among African Americans, and to recommend relevant proactive policy and practice changes to aid in eliminating this health problem.

CONSENSUS PROCESS: In July 2002, the NMA convened the "Managing Pain: The Challenge in Underserved Populations: Appropriate Use versus Abuse and Diversion" Consensus Meeting in Washington, DC. The country's most renowned experts in the area of pain management and substance abuse reviewed substantial information regarding pain management and substance abuse including the following:

- A draft summary paper on pain management and substance abuse that served as briefing material for consensus members;
- Annotated bibliographies;

- Articles on pain management and substance abuse; and
- Key presentations on pain management and substance abuse.

OUTLINE

I. Introduction
II. Overview and Assessment of Treatment Options
III. Impact of Pain on Various Population Groups
IV. Challenges in Pain Treatment
V. Race and Ethnicity in Pain Management
VI. Recommendations
VII. Conclusion
VIII. Bibliography

INTRODUCTION

The National Medical Association (NMA) is the largest and oldest national organization representing African-American physicians and health professionals in the United States. Established in 1895, the NMA represents more than 25,000 African-American physicians and the patients they serve. Through its membership, professional development, community health education, advocacy, research, and its efforts with federal and private agencies and corporations, the NMA is committed to improving the health status and outcomes of minority and disadvantaged people. While throughout its history, the National Medical Association has focused primarily on health issues related to African Americans and medically underserved populations, its principles, goals, initiatives, and philosophy encompass all sectors of the population.

At its inception, the NMA's objective was "the banding together for mutual cooperation and helpfulness, the men and women of African descent who are legally and honorably engaged in the practice of medicine." More than 100 years later, the NMA has become firmly established in a leadership role in medicine.

Pain is one of the most common reasons for a doctor's visit and, left undertreated, is a serious public health problem that affects a wide cross-section of Americans. Studies have shown that undertreated pain is particularly acute in minority communities primarily because of physician bias, stereotyping, and poor physician–patient communication. This paper outlines the problems surrounding pain diagnosis and treatment, racial and ethnic disparities in treatment, and regulatory concerns regarding substance abuse.

Pain is the fifth "vital sign," which, if left untreated, can impair function and diminish the quality of life.[1] Yet, until the U.S. Congress declared a "Decade of Pain Control and Research," starting January 1, 2001, there was no significant federal recognition of the importance of pain management.[2]

Studies have shown that chronic pain affects at least 15% of all children,[3] and about 20% of Americans over 65. It is also the second leading cause of medical work-related absenteeism.[4]

Despite research showing that effective pain management can improve the lives of patients, pain is often undertreated, because physicians and other "frontline" staff underestimate the patient's concerns and fear sanctions from regulatory agencies.[5] Patient reluctance to report pain,[1] physician bias, and physician-patient communication barriers also pose serious problems.[6] In addition, state-financed Medicaid is increasingly denying payments for optimal pain treatment because of rising costs.

OVERVIEW OF ASSESSMENT AND TREATMENT OPTIONS

Assessment

Accurate patient assessment is essential for the effective management of pain and also plays a critical role in identifying potential abuse problems. The American Pain Society (APS) guidelines set three main goals for pain assessment:[7]

- To characterize the patient's pain status and related experience over time;
- To provide a basis for treatment decisions; and
- To document the effectiveness of pain management strategies

Since pain is a subjective experience, diagnosis is often difficult. Physicians must rely on patient self-reporting, as well as indicators of pain, such as facial expressions or posturing, and other valid and reliable clinical instruments. Using pain indicators is particularly crucial in treating neonates, children, and patients who are unable to speak.[8]

Assessment is best done within a diagnostic interview. Completing a comprehensive family history documents not only the patient's and family's pain history, but also past and present treatments for pain and socioenvironmental situations that may influence pain perception.

Assessment tools, such as the McGill Pain Questionnaire,[9] facilitate self-reporting by allowing patients to indicate the location of their pain and its intensity, as well as changes in pain intensity over time.

For children, the APS and the American Academy of Pediatrics (AAP) recommend using self-reporting, behavioral observation, or physiologic measures, depending on the age of the child.[10] In addition, these organizations note that behavioral observations can be an acceptable alternative when valid self-reporting is unavailable.

Treatment Options

According to the World Health Organization's three-step analgesic ladder (Figure 1), pain medications should be administered according to the intensity and pathophysiology of symptoms and individual requirements. The latter recommends the type of drugs that should be administered for mild, moderate-to-severe, and severe pain. Nonsteroidal anti-inflammatory agents, such as aspirin, ibuprofen, and naproxen, are the recommended base drugs for mild pain. Patients with moderate-to-severe and severe pain generally require an opioid, such as codeine and morphine, respectively.[11]

Opioids should be administered on a regular basis rather than on an as-needed basis to maintain good pain relief. For patients experiencing chronic pain, slow-release oral preparations should be taken every 12 hours instead of three or four times per day. In addition, patient-controlled infusion pumps can deliver relief at the appropriate time for those unable to tolerate oral medication.[12]

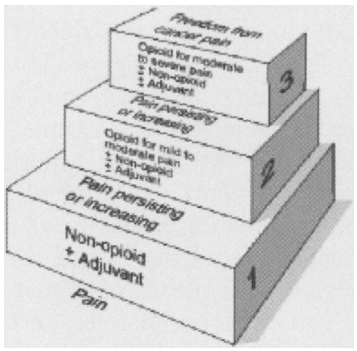
Some side effects of opioid treatment include nausea, constipation, vomiting and, on rare occasion, respiratory depression. In addition, patients can also suffer from itching, dry mouth, and urinary retention.[11]

NONOPIOID TREATMENT

Adjuvant analgesics and nonpharmacological interventions have also been used in treating pain. Adjuvants help and enhance the pharmacological effect of drugs. Although they are not used primarily for pain management, adjuvants have proven to be beneficial in selected circumstances and are now commonly used in treating many malignant and nonmalignant syndromes.

Some adjuvant analgesics are particularly useful for patients with cancer pain, and when used in this setting, are typically added to an optimally titrated opioid regimen. Some approaches use nonpharmacological interventions to reduce or even eliminate opioid use. Neurostimulatory treatments, which use mild electric currents to stimulate certain nerve endings, are typically applied to patients with refractory neuropathic pains and those with acute, transient pains. Anecdotal reports, however, indicate that while patients may initially respond, long-term benefit is rarely achieved. Physiatric techniques, anesthetic approaches, surgical neuroblative procedures, and psychological approaches have all been applied when a patient fails to respond to a conventional oral opioid therapy.

Figure 1. World Health Organization's Analgesic Ladder



IMPACT OF PAIN ON VARIOUS POPULATION GROUPS

Pain and Gender

Gender inequity exists in pain management. Women are often less likely to receive adequate treatment for pain, although they report more pain, more intense pain, and more painful conditions.[13] Some studies have pointed to the "Yentl Syndrome," which states that women tend to be treated less aggressively during initial visits until they prove that they are as sick as men. Additionally, a study by Bendelow suggests that women are thought to be equipped with a natural capacity for enduring pain, in part, because of the pain associated with childbearing.[14] Other studies indicate that women are less likely to wait until pain has a debilitating effect before reporting it. Research indicates, however, that the tendency among clinicians to give more weight to objective indicators makes them initially discount women's verbal pain reports. In a study led by Carol S. Weisse, male and female physicians divided along gender lines in prescribing analgesic doses for male and female patients. Male doctors tended to select higher doses for male patients, while female doctors prescribed higher doses for female patients. Additionally, female doctors also prescribed higher doses for black patients than their male counterparts.[15]

Pain and Neonates

Many physicians believe that neonates are less sensitive to pain and therefore do not adopt adequate assessment methods and efficacious management approaches for treating them.[16] In the 1980s, infants commonly underwent surgery without anesthesia and received minimal postoperative or preprocedural analgesia.[17] Invasive procedures, such as blood sampling and immunization, as well as many diagnostic, surgical, and therapeutic procedures, can cause pain in newborns as well as sick and preterm infants. Preterms are especially sensitive to pain, and their immature nervous systems make them more vulnerable to the adverse effects of pain. In addition to the potential for structural

and physiological changes within the nervous system, painful experiences, if repeated, can cause decreased pain thresholds and hypersensitivity to pain.[18] However, increasing attention is being paid to pediatric pain. In 2001, the International Evidence-Based Group for Neonatal Pain published evidence-based guidelines, including minimizing stressful conditions, pharmacological therapy and behavioral methods, such as nonnutritive sucking.[19,20] In 1999, the American Academy of Pediatrics revised its policy on circumcision, making pain relief mandatory during the procedure. The American Society of Anesthesiologists has also called for more appropriate drug therapies for infants.

Pain and Cancer

More than one-third of adult patients undergoing therapy for cancer report significant pain, with up to 81% reporting two or more types of pain. Bone pain is the most common cause, followed by tumor infiltration of the nerve and hollow viscus. Pain associated with therapy also affects 15–20% of adults and up to 60% of children.[12] Undertreatment is common among cancer patients, particularly the elderly, as pain is often thought to be less prevalent among this group.[6,20] In fact, more than 50% of the people experiencing cancer pain are over 65.[21] Studies of pain management among elderly cancer patients show that they are routinely not prescribed or underprescribed pain medication. Bernabei et al. examined care at nursing homes and found that 26% of those in daily pain received no analgesic agent. They also found that patients 85 and older were less likely to receive morphine or strong opiates than those aged 65 to 74.

Pain and HIV/AIDS

Between 30–60% of HIV/AIDS patients suffer from disease-related pain with the prevalence and intensity increasing as the disease progresses. In a 1996 presentation, Dr. W. Breibart of Memorial Sloan Kettering Cancer Center noted the similarities in managing cancer- and HIV/AIDS-related pain. He further pointed out that 40% of the pain was directly related to the virus and 30% with the therapy. Typically, patients report initial numbness, burning, and tingling of the hands and feet. This is followed by abdominal pain from opportunistic infection.[22] Several studies have shown that 59% of children suffering from the virus also experience similar types of pain. They are, however, even less likely than their adult counterparts to receive adequate pain treatment since many clinicians believe that children do not experience pain.[23]

Pain and Sickle Cell

Pain is a hallmark clinical symptom of sickle cell disease. Sickle cell disease predominantly affects African Americans, African/Hispanic/Caribbean, and South American persons in the United States[24,25] and can occur in patients as young as six months and continue throughout a person's lifetime. Effective pain treatment is often hampered by inadequate knowledge of the condition, the variability and unpredictability of sickle cell episodes, and patient fear of addiction.[9,26,27] In 1999, the APS published the first evidence-based guidelines for managing acute and chronic pain in sickle cell.

CHALLENGES IN PAIN TREATMENT

Substance Abuse Problems

Much of the fear surrounding pain treatment relates to the use of opioids. While pain specialists view the potentially abusable drugs as essential in caring for patients, many drug-addiction specialists and law enforcement officials view them as a major cause of abuse with dire consequences for individuals and society as a whole.

Because opioids are one of several types of controlled substances that have potential for abuse, they are carefully regulated by the U.S. Drug and Enforcement Agency (DEA) and other state agencies. For example, a physician must be licensed by state medical authorities and registered with the DEA before prescribing a controlled substance.

One of the most effective ways to prevent diversion and addiction is observing and documenting "the four As:"

- Analgesia;
- Activities of daily living;
- Adverse effects, and
- Aberrant behaviors.

Pain professionals should also consider additional steps with patients who demonstrate high abuse potential. These include selecting opioids with lower abuse potential, maintaining urine toxicology screens, prescribing smaller quantities and lower doses of opioids, scheduling frequent visits when prescriptions are renewed, or signing and adhering to a physician-patient contract.[28]

The physician–patient contract allows the physician to clearly indicate what behaviors constitute responsible drug-taking and consequences for breaches of contract.

The terms can include the following:

- Patient will receive medicine from only one prescriber and pharmacy;

- The patient will take the medicine only as prescribed;
- Patient must visit the prescribing doctor for refills and cannot seek refills from staff or over the phone;
- Patient cannot share medication with others or take nonprescribed medicine concurrently; and
- Possibility of random urine screens and police notification if illicit drugs are identified.

Care must be taken, however, to avoid mislabeling patients as addicts. In 2001, the APS, the American Academy of Pain (AAPM), and the American Society of Addiction Medicine (ASAM) issued a joint consensus paper, with the following recommended definitions, to address frequently misunderstood terms:

- tolerance
- physical dependence and
- addiction
- and their use in evaluating opioid use in pain treatment:[29]
- Tolerance is a state of adaptation in which exposure to a drug induces changes that result in a diminution of one or more of the drug's effects over time.
- Physical dependence is a state of adaptation that is manifested by a drug-class-specific withdrawal syndrome that can be produced by abrupt cessation, rapid dose reduction, decreasing blood level of the drug, and/or administration of an antagonist.
- Addiction is a primary, chronic, neurobiologic disease, with genetic, psychosocial, and environmental factors influencing its development and manifestation. It is characterized by behaviors that include one or more of the following: impaired control over drug use, compulsive use, continued use despite harm, and craving.

Patients with a history of opioid abuse can be divided into categories that may predict some of the problems encountered during treatment:

1) remote history of opioid substance,

2) history of opioid abuse and current methadone maintenance treatment, and

3) active opioid abuse.

In addition, attention must be paid to those with a remote or present history of addiction to alcohol, illicit drugs, or nonopioid prescription drugs.[12]

The more obvious signs of aberrant drug-related behavior include prescription forgery, injecting oral formulations, multiple episodes of prescription "loss," repeated attempts to seek prescriptions from other clinicians or emergency rooms, and concurrent abuse of alcohol combined with illicit drugs. Less-obvious behavior can also be a sign of abuse: aggressive complaining about the need for additional prescriptions, drug hoarding during periods of reduced symptoms, requests for specific drugs, and unapproved use of the drug to treat another symptom.[30]

To protect their practices, doctors must follow standards of practice. These standards assist the physician in safeguarding their prescription supplies including their prescription pads.

Barriers to Pain Treatment

Fear of Sanctions. Highly publicized cases of doctors and pharmacies accused of illegally prescribing and selling opioids and other potent painkillers have had a chilling effect across the country.[31,32] These cases demonstrate the balancing act doctors face in providing adequate care for patients while ensuring that they do not infringe upon federal or state laws regarding opioid drugs.

Undoubtedly, misuse of prescription drugs is at an alarming rate; however, determining illegitimate use is challenging. Data from the National Institute on Drug Abuse (NIDA) indicate that as of 1999 between four and nine million people abused prescription drugs.[33] However, the report did not distinguish between one-time and chronic nonmedical use.

OxyContin, approved by the FDA in 1995, is a time-released form of oxycodone, which is derived from opium and contains the same active ingredients as Percodan and Percocet. OxyContin was intended for use by terminally ill cancer patients and those suffering from chronic pain. This drug has received substantial negative press linking it to addiction, suffering and death of patients who have used the medication.

The DEA estimates that OxyContin, which was prescribed more than six million times in 2000, is increasingly being diverted and sold illegally "on the street." Additionally, figures from the Drug Abuse Warning Network (DAWN) show that although opioids accounted for only 3.8% of DAWN mentions in 1996, a 2003 DAWN report documented increasing emergency department visits for narcotic analgesic abuse since the mid-1990s. These figures reported by DAWN have doubled between 1994 and 2001.[34,35]

Faced with these challenges, physicians may

decrease their prescription dosages or avoid prescribing certain opioids in fear of either addicting their patients or attracting the attention of the DEA or state regulatory authorities.[36,37]

In 1997, the American Pain Society and the American Academy of Pain Medicine developed a consensus that established clinical parameters for medical practitioners in this area. The consensus states that physicians must use the principles of good medical practice in prescribing opioids and retain autonomy and discretion in addressing pain.[38] In addition, the Federation of State Medical Boards of the United States issued model guidelines in 1998 stating that the validity of prescriptions for controlled substances will be based on the physician's treatment and available documentation, rather than on the quantity and chronocity of prescribing.

The Pain and Policy Study Group at the University of Wisconsin also developed a research-based evaluation guide to examine federal and state policies on pain management. The guide is aimed primarily at informing state and national discussions on policies that have the potential to either enhance or inhibit professional medical practice and patient access to opioid analgesics.

In 2001, both Congress and the Food and Drug Administration scheduled hearings on the use and abuse of prescription pain medications and proposed restrictions on certain opioid drugs to reduce the potential for diversion. During the hearings, the American Pain Society urged the federal government not to infringe upon the ability of physicians to prescribe medication as needed for patients in severe pain. The APS also objected to government proposals to restrict the prescribing of potent opioids to only pain specialists on the grounds that there were too few of them to adequately treat all patients in the United States suffering from chronic pain.[39]

There is also concern about new instructions to the DEA from Attorney General John Ashcroft, which stated that prescribing a controlled substance for physician-assisted suicide in Oregon is in violation of the Controlled Substances Act. While the Act requires physicians to prescribe controlled substance for a "legitimate medical purpose," the federal government is relying on state governments to define "legitimate medical purpose."

Traditionally, the regulation of medical practice has been left to states and their medical boards. For example, the preamble to the Medicare law specifically prohibits any federal "supervision of control over the practice of medicine or the manner in which medical services are provided."[40]

After the passage of the Oregon physician-assisted suicide law, it was deemed that physicians in that state could not be prosecuted under the Controlled Substances Act.[41] Attorney General Ashcroft's reversal of this decision by former Attorney General Janet Reno now means that Oregon physicians can be prosecuted under the act.[42]

This new decision is raising concern about more aggressive review of physician prescribing practices and the possibility of civil or criminal prosecution. Additional concerns include, the reversal may lead to the federal government taking over the responsibility of determining the limits of medical practice.

State Regulations

In response to increasing reports of prescription drug abuse and to curtail suspected abuse of OxyContin by Medicaid patients, several states enacted legislation requiring prior authorization. Hence, prescriptions must be individually approved by the state before dispensation. In Maine, for example, prior authorization is required for all noncancer patients and the prescribing doctor must show the use of two alternative long-acting narcotics before prescribing OxyContin. And, in Washington, authorization is needed for all prescriptions exceeding two tablets per day.

Several states are developing prescription-tracking systems in order to monitor patients that have been prescribed OxyContin.

States, such as Pennsylvania, California, Massachusetts, Nevada, Utah, and Kentucky, are some of the nine states that will share a two-million dollar federal grant to enhance or begin programs that detect prescription drug abuse.

Knowledge Gap

Ongoing physician education is crucial. Very few medical schools offer training in pain management and practicing physicians are often unaware of existing clinical practice guidelines.[44]

Other than pain specialists, few healthcare professionals receive adequate clinical training in pain management.[1,14] Research indicates that additional training is needed, and those who ignore updated guidelines from the American Pain Society and other organizations do so increasingly at their and the patient's risk. In 2001, a California internist was successfully prosecuted for not providing adequate pain care to an 85-year-old man. The determining factors in the case were the doctor's admission that he had not kept abreast of current developments relating to palliative care and new guidelines for pain management.[45]

Web-based programs can be used to keep clinicians abreast of these regulations. Anecdotal data also indicates that other "front line" medical staff must also be trained to ensure that their judgment calls on dosage requirements do not deprive patients of relief.

RACE, ETHNICITY AND PAIN MANAGEMENT

The undertreatment of racial and ethnic minorities is of particular concern. Several studies undertaken since 1993 have shown that these groups are at higher risk for oligoanalgesia, or the ineffective treatment of pain. While the studies identified the type of healthcare facility and the physician's impressions of the patient's pain as the key determinants in whether pain was treated (or not treated) properly, they also highlighted physician bias and poor physician-patient communication.[46]

Intentional or unintentional physician bias based on a patient's race or ethnicity can color interpretations of symptoms, predictions of patient behavior, and medical decision-making.

A 2000 study by Todd et al. determined that white patients were more likely than black patients (74% versus 57%) to receive analgesics despite having similar pain complaints. The same study found that blacks had a 66% greater risk of receiving no analgesic.[47]

Disparities have also been found in the outcomes of physician-patient interaction. Lisa Cooper-Patrick et al. examined how race, ethnicity, and sex of patients affected the extent to which physicians involved them in treatment decisions. The study found that African Americans were significantly less likely than white patients to have participatory visits with their physicians. A third study by Charles S. Cleeland et al. noted that concern about potential drug abuse in minority patients may be a factor in inadequate prescriptions for minorities.[6]

Physicians may also have greater difficulty in assessing pain in minority patients because of differences in language and cultural background.[48,49] Language barriers between the physician and patient greatly restrict the physician's ability to properly assess the patient's pain and prescribe an appropriate course of treatment. The U.S. Department of Health and Human Services Office of Civil Rights has issued guidelines on enforcement of Title VI of the Civil Rights Act of 1964, which mandates access to healthcare and social services for Limited-English-Proficiency patients.

Cultural differences may impede a physician's ability to understand a patient's expression of his or her symptoms. Patient inability or reticence in advocating for their health may also be a cultural factor that must be taken into consideration. The Cleeland study indicated that Hispanics expressed greater concern than blacks about taking too many analgesics and were, therefore, more reluctant to report pain and accept strong analgesics. Some studies suggested that targeted education campaigns should be directed at minority patients to increase their awareness of their risk for poor pain management.

It is often difficult to separate racial and ethnic disparities from socioeconomic disparities. The location of the healthcare facility should, therefore, be considered in understanding disparities in pain treatment.[46] Studies have found that the percentage of patients who received inadequate pain treatment was significantly higher in communities that treated predominantly black and Hispanic patients. These results could be attributed to factors, including limited resources at the facility and healthcare providers' perceptions of patients. Inner-city hospitals are particularly vulnerable to the effects of inadequate financing—fewer prescription drugs and staff—which impinges upon their ability to provide adequate care.

Even if the drugs are prescribed, minority patients are often unable to obtain opioids from their neighborhood pharmacy. R. Sean Morrison et al.50 examined the availability of commonly prescribed opioids in New York City pharmacies. The study found that 51% of the respondents did not have adequate medicine in stock to treat severe pain in neighborhoods, where less than 40% of the residents were white. It further indicated that two-thirds of those that did not carry any opioids were in predominantly nonwhite neighborhoods. In contrast, 72% of the pharmacies carried adequate stocks where at least 80% of the population was white. Pharmacists cited several reasons:

- regulations for disposal;
- illicit use;
- fraud;
- low demand; and
- the fear of theft.

The researchers, however, noted several limitations in the study. First, it concentrated on recommended first-line medications, and there may be a possibility that survey participants did carry treatments for severe pain that were not discussed. Second, it was conducted in New York City, and the results may not be generalizable to other areas. Additionally, it was impossible to determine conclusively whether there were differences in supplies across neighborhoods of differing ethnic composition if all other variables were held constant.

RECOMMENDATIONS

Pain is a common feature of many diseases, including cancer, HIV/AIDS, and sickle cell. Whether acute or chronic, un- or undertreated pain can diminish a patient's quality of life. For ethnic and racial minorities, this problem is even more

acute because of stereotyping. To this end, the NMA recommends the following policies for the safe and effective management of pain:

Education

- A pain management curriculum should be integrated throughout medical and related health education programs at the undergraduate and postgraduate continuing medical education levels. As part of this curriculum development, there will be a concerted effort to increase the number of culturally competent specialists in the area of pain management. This curriculum should also be promoted through collaborations with historically black colleges and universities.

- Health education programs for the public should include appropriate instruction and understanding of pain management, prevention of abuse and addiction.

- Special attention should be directed toward adolescents and secondary education students through a structured curriculum regarding proper use of prescription medications and prevention of abuse.

- A concerted effort will be made to provide training for law enforcements officials, state controlled substances authorities, the judicial community and business leaders.

Research

- More focus must center on the collection of data by race and ethnicity to allow better identification of the reasons for healthcare disparities in pain management with a focus on their elimination.

- More research should be directed toward pain management of diseases, which disproportionately affect minorities, women, and children.

- African-American patients and researchers should participant in clinical trials on new treatments for pain management. These trails should also be actively promoted.

Physician Practice

- Incorporate into practice medical record documentation of the four A's of treatment outcomes: Analgesia, Activities of Daily Living, Adverse Effects, and Aberrant Drug Taking Behaviors.

- Perform an adequate history and physical examination to include a social history, which specifically would address a history of substance abuse, a list of all controlled substances prescribed and by whom, and mental health disorders and treatment.

- Develop collaborations with local pharmacies and law enforcement officials in order to provide early detection of aberrant drug taking behaviors.

- Adopt standards for prescriptions, which include tight control of prescription pads, the use of tamper-resistant pads, writing out in words the quantity and strength of the medication to be dispensed as well as spelling the number, and not include on preprinted prescription pads the medical license or controlled substance registration number.

- Physicians should record in the medical record signs of drug abuse, such as inflamed nares, a perforated nasal septum, skin tracks, and skin lesions caused by subcutaneous injection.

- Recognize and record behavior suggestive of addiction, such as loss of control, compulsive use, and use despite harm.

- Toxicology should be used when there is a suspicion of diversion or aberrant drug-taking to identify the presence of the prescribed drug, as well as any other illicit drugs in body fluids.

- If diversion of prescription drugs is suspected, the local police department should be notified.

CONCLUSION

Inadequate pain management is a serious public health problem. Resolution of this issue will depend greatly on improving physician knowledge of pain management while eliminating the potential for addiction and abuse. Fear of investigation or sanction is also a contributing factor in inappropriate or inadequate treatment of chronic pain. Therefore, greater awareness of federal, state, and local regulations is needed. Collaborations with other organizations for additional research on pain management are also important, as these partnerships can provide improved guidelines for treating various subpopulations. Finally, particular attention must also be paid to increase public education on the benefits of pain management and the safe use of treatment modalities.

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